

We claim:

1 1. A method of clustering a plurality of client IP addresses within a distributed information  
2 network, the method comprising the steps of:

3 generating a unified prefix/netmask table from a plurality of network routing table  
4 prefix/netmask entries;

5 comparing each of the plurality of client IP addresses with the unified prefix/netmask  
6 table to determine a common prefix between each of the plurality of client IP addresses and at  
7 least one of the entries in the unified prefix/netmask table; and

8 grouping client IP addresses which share a common prefix into a network client cluster.

1 2. The method of claim 1, wherein the step of generating a unified prefix/netmask table  
2 from a plurality of network routing table prefix/netmask entries includes the steps of:

3 extracting the prefix/netmask entries from a plurality of network routing tables; and  
4 converting the prefix/netmask entries into a standardized format.

1 3. The method of claim 1, wherein the client IP addresses are extracted from a network log.

1 4. The method of claim 3, further comprising:  
2 identifying existing spiders and/or proxies within the network log.

1 5. The method of claim 1, further comprising:  
2 placing one or more servers in front of a network client cluster, wherein the servers are at  
3 least one of proxy servers, cache servers, content distribution servers and mirror servers.

1 6. The method of claim 1, wherein the common prefix is the common longest matching  
2 prefix from the unified prefix/netmask table.

1 7. The method of claim 1, wherein the distributed information network is the World Wide  
2 Web.

1 8. A method for guiding placement of servers within a distributed information network  
2 using at least one network server log and at least one network routing table from the distributed  
3 information network, the method comprising:

4 extracting a plurality of prefix/netmask entries from the at least one network routing  
5 table;

6 generating a unified prefix/netmask table from the plurality of extracted prefix/netmask  
7 entries;

8 extracting a plurality of client IP addresses from the at least one network server log;

9 comparing each of the plurality of client IP addresses with entries in the unified/prefix  
10 netmask table to determine a common longest matching prefix between each of the plurality of  
11 client IP addresses and the entries in the unified/prefix netmask table; and

12 grouping all of the client IP addresses which share the common longest matching prefix  
13 into at least one client cluster.

1 9. The method of claim 8, wherein generating a unified prefix/netmask table from the  
2 plurality of extracted prefix/netmask entries includes:

3 converting the prefix/netmask entries into a standardized format.

1 10. The method of claim 8, wherein the servers are selected from the group consisting of  
2 proxy servers, cache servers, content distribution servers and mirror servers.

1 11. The method of claim 8, wherein each client cluster is assigned one or more servers.

1 12. The method of claim 8, further comprising:

2 assigning one or more servers to each client cluster based on the number of requests  
3 issued by the clients within each client cluster.



